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|-----------------|-------------|----------------------|---------------------|
| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. |
|-----------------|-------------|----------------------|---------------------|

*dkm*  
EXAMINER

|          |              |
|----------|--------------|
| ART UNIT | PAPER NUMBER |
|----------|--------------|

*30*

DATE MAILED:

Please find below and/or attached an Office communication concerning this application or proceeding.

Commissioner of Patents and Trademarks

## Office Action Summary

Responsive to communication(s) filed on Aug 22, 2000

|                 |                |   |
|-----------------|----------------|---|
| Application No. | Applicant(s)   | Fuchs et al.  |
| 08/726,093      |                |   |
| Examiner        | Group Art Unit |   |
| Ardin Marschel  | 1631           |  |



Office:

Responsive to communication(s) filed on Aug 22, 2000

This action is **FINAL**.

Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle* 35 C.D. 11; 453 O.G. 213.

A shortened statutory period for response to this action is set to expire 3 month(s), or thirty days, whichever is longer, from the mailing date of this communication. Failure to respond within the period for response will cause the application to become abandoned. (35 U.S.C. § 133). Extensions of time may be obtained under the provisions of 37 CFR 1.136(a).

is/are pending in the a  
is/are with the a  
is/are allowed.

Disposition of Claim

Claim(s) 54, 57-62, and 64-71 is/are rejected.

Claim(s) 1-53, 55, 56, 63, and 72-74 have been canceled. is/are rejected.

Claim(s) 54 is/are rejected.

Claim(s) 57-62, 64, 65, and 67-71 are subject to restriction or election requirement.

Claim(s) 66 is/are objected to.

Claims \_\_\_\_\_ is/are objected to.

## Application Papers

|   |              |   |  |  |
|---|--------------|---|--|--|
| Claim(s) _____  | Claims _____ | See the attached Notice of Draftsperson's Patent Drawing Review, PTO-948.   |  |  |
| Application Papers  |              | <input type="checkbox"/> The drawing(s) filed on _____ is/are objected to by the Examiner.<br><input type="checkbox"/> The proposed drawing correction, filed on _____ is <input type="checkbox"/> approved <input type="checkbox"/> disapproved.<br><input type="checkbox"/> The specification is objected to by the Examiner.<br><input type="checkbox"/> The oath or declaration is objected to by the Examiner. |  |  |
| - 5 -<br>for foreign priority under 35 U.S.C. § 119(a)-(d).<br>Priority documents have been |              |   |  |  |

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Priority under 35 U.S.C. § 119  
Acknowledgement is ma

The specification is objected to by the Examiner.

The oath or declaration is objected to by the Examiner.

**Priority under 35 U.S.C. § 119**

Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d).

All    Some\*    None   of the CERTIFIED copies of the priority documents have been received.

received in Application No. (Series Code/Serial Number) \_\_\_\_\_.

received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

\*Certified copies not received: \_\_\_\_\_.

Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).

Attachment(s)

Attachment(s) \_\_\_\_\_

- Notice of References Cited, PTO-892
- Information Disclosure Statement(s), PTO-1449, Paper No(s). \_\_\_\_\_
- Interview Summary, PTO-413
- Notice of Draftsperson's Patent Drawing Review, PTO-948
- Notice of Informal Patent Application, PTO-152

— SEE OFFICE ACTION ON THE FOLLOWING PAGES —

## Office Action Summary

Serial No. 08/726,093

Art Unit: 1631

- 2 -

Applicants' arguments, filed 8/22/00, have been fully considered and they have been found to be persuasive to overcome previous rejections of record. Rejections and/or objections not reiterated from previous office actions are hereby withdrawn.

The following rejections and/or objections are newly applied. They constitute the complete set presently being applied to the instant application.

The following is a quotation of 35 U.S.C. § 103(a) which forms the basis for all obviousness rejections set forth in this office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Subject matter developed by another person, which qualifies as prior art only under subsection (f) or (g) of section 102 of this title, shall not preclude patentability under this section where the subject matter and the claimed invention were, at the time the invention was made, owned by the same person or subject to an obligation of assignment to the same person.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. § 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 C.F.R. § 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. § 103(c) and potential 35 U.S.C. § 102(f) or (g) prior art under 35 U.S.C. § 103(a).

Claims 57-60, 64, 65, and 67-71 are rejected under 35 U.S.C.

§ 103(a) as being unpatentable over Fuchs et al. (P/N 5,630,924).

This rejection is maintained and reiterated from the previous office action, mailed 3/21/00. Applicants firstly argue that the reference requires two binding partners contrary to the instant invention. In response applicants are pointed to the open claim language term, comprising, in claim 57, line 1, for example. This open claim language results in the claim being inclusive of embodiments with additional components, such as multiple binding partners. Thus, whether the reference cites one or more binding partners, such embodiments are within the metes and bounds of the instant claims. Applicants then argue that the PNAs of the reference are non-labeled. In response this is also non-persuasive to overcome the rejection because PNAs carry nucleobases which are extremely well known detectable moieties and are as such labeled. Lastly, applicants note that they were under obligation to assign their invention to the same entity at the time the inventions were made. In response this does not negate this rejection as based on obviousness due to the reference having both an earlier filing date as well as different inventive entities thus making this rejection a 103(a) rejection based on 102(e).

Claims 57-62, 64, 65, and 67-71 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Fuchs et al. (P/N 5,630,924) taken in view of Summerton et al. (P/N 5,217,866).

This rejection is maintained and reiterated from the previous office action, mailed 3/21/00. Applicants argue this

rejection via a excerpt from a previous statement. This excerpt firstly argues that labels in Summerton et al. are separate from the PNA probes and are bound by phosphate groups via electrostatic interactions. As noted above the instant claims contain open claim language such that additional components including labeling reagents are included within these instant open claims. Applicants also admit that these reagents in Summerton et al. result in labeling the probes which is exactly what is stated in the instant claims via the phrase "PNA probe labeled with a detectable moiety" such as present in instant claim 57, line 4. It is also lastly noted that the instant claims are directed to apparatus practice and not methods of use. Therefore, a detectable label such as either added to PNAs or in the nucleobases of PNAs are equally detectable labels and support the maintaining of this rejection.

Claim 66 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Claim 54 is allowed.

**THIS ACTION IS MADE FINAL.** Applicants are reminded of the extension of time policy as set forth in 37 C.F.R. § 1.136(a).

A SHORTENED STATUTORY PERIOD FOR RESPONSE TO THIS FINAL ACTION IS SET TO EXPIRE THREE MONTHS FROM THE DATE OF THIS ACTION. IN THE EVENT A FIRST RESPONSE IS FILED WITHIN TWO MONTHS OF THE MAILING DATE OF THIS FINAL ACTION AND THE ADVISORY ACTION IS NOT MAILED UNTIL AFTER THE END OF THE THREE-MONTH SHORTENED STATUTORY PERIOD, THEN THE SHORTENED STATUTORY PERIOD WILL EXPIRE

ON THE DATE THE ADVISORY ACTION IS MAILED, AND ANY EXTENSION FEE PURSUANT TO 37 C.F.R. § 1.136(a) WILL BE CALCULATED FROM THE MAILING DATE OF THE ADVISORY ACTION. IN NO EVENT WILL THE STATUTORY PERIOD FOR RESPONSE EXPIRE LATER THAN SIX MONTHS FROM THE DATE OF THIS FINAL ACTION.

Papers related to this application may be submitted to Technical Center 1600 by facsimile transmission. Papers should be faxed to Technical Center 1600 via the PTO Fax Center located in Crystal Mall 1. The faxing of such papers must conform with the notices published in the Official Gazette, 1096 OG 30 (November 15, 1988), 1156 OG 61 (November 16, 1993), and 1157 OG 94 (December 28, 1993) (See 37 CFR § 1.6(d)). The CM1 Fax Center number is either (703) 305-3014 or (703) 308-4242.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ardin Marschel, Ph.D., whose telephone number is (703) 308-3894. The examiner can normally be reached on Monday-Friday from 8 A.M. to 4 P.M.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael Woodward, can be reached on (703) 308-4028.

Any inquiry of a general nature or relating to the status of this application should be directed to Patent Analyst, Tina Plunkett, whose telephone number is (703) 305-3524.

November 17, 2000

*Ardin H. Marschel*  
ARDIN H. MARSCHEL  
PRIMARY EXAMINER